Exhibit 58

Deposition of Roger D. Blair, Ph.D. (December 8, 2017) (excerpted)

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             UNITED STATES DISTRICT COURT
                DISTRICT OF NEVADA
   CUNG LE; NATHAN QUARRY, JON
   FITCH, on behalf of
   themselves and all others
   similarly situated,
             Plaintiffs,
             vs.
                                 ) Case No.
                                   2:15-cv-01045-RFB-(PAL)
   ZUFFA, LLC, d/b/a Ultimate
   Fighting Championship and
   UFC,
            Defendant.
                HIGHLY CONFIDENTIAL
    VIDEOTAPED DEPOSITION OF ROGER D. BLAIR, Ph.D.
                  Orlando, Florida
                  December 8, 2017
                      7:57 a.m.
Reported By:
Dawn A. Hillier, RMR, CRR, CLR
Job No. 52572
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14 16 1 the NCAA cartel. I have another paper that's in 1 but other than that, are there any other distinguishing 2 2 progress on rethinking baseball's antitrust exemption. characteristics about the labor markets in sports as 3 3 I have a chapter in the Oxford handbook on compared to other industries? 4 sports economics regarding the -- you know, regarding, 4 A Well, I mean, I don't know what you're 5 again, baseball's antitrust exemption. And a paper in 5 referring to or, you know, I mean, I'm assuming that 6 the antitrust bulletin that was addressing the 6 you've got something in mind. 7 7 inferences one might draw with respect to the treatment But --8 8 that Barry Bonds got at the end of his career when his Q Well let me -- let me clarify -- go ahead. 9 contract ran out and he couldn't find anybody that 9 A No. You go. 10 10 Q All right. So, I guess what I'm getting at is wanted to sign him. 11 There probably are some other things that I'm 11 I guess some economists study industrial organizations 12 not thinking of. 12 and study the way firms interact in a variety of 13 13 Q It sounds like you've written pretty widely in industries and don't necessarily separate out firms in 14 the economic analysis of sports or sports economics; is 14 one industry from another. And I guess, is there 15 15 that right? anything -- is there any reason -- is there any reason 16 16 A Well, to some extent, yes. why, looking at labor markets and sports, for example, 17 17 O What, if anything, would you say defines vou might bring tools to bear that are different than a 18 sports economics as a distinct field? Or distinguishes 18 standard -- than the standard methodologies of 19 the study of sports as an economist? 19 industrial organizations? 20 20 A The economics is not different because we're A Well, so, there are some things that are a 21 talking about sports. The institutions are -- you know, 21 little -- I guess a little unusual. A lot of the 22 may be different. There are -- when we're talking about 22 professional athletes are unionized. And the union 23 23 is -- what the union bargains for is a little strange in professional sports this spans all kinds of leagues and 24 24 organizations. So, you know, you could be talking about this sense. That the unions don't appear to be at all 25 the PGA Tour, which is an organization as opposed to the 25 concerned with individual compensation. And, so, 17 15 1 National Football League, which is a -- which is a 1 they're sort of bargaining for a pot of money that the 2 league. You know, as I say, the economics aren't really 2 athletes can then fight over. And, you know, I mean, 3 different. The institutions are somewhat different. 3 so, you have, you know, dollars associated with, you 4 The -- there are some unique or idiosyncratic rules that 4 know, a particular team. And then the athletes that are 5 5 show up in collective bargaining agreements that, you going to be employed by that team essentially have to 6 know, that come into play that make things -- they 6 try to get as much of that pool as they can, 7 7 affect the analysis, but they don't change the central individually, which is, you know -- I mean, usually what 8 focus which should be in terms of -- in most cases, in 8 you think of with unions, is that they're trying to 9 9 terms of microeconomics. To some extent, there are negotiate so that, you know, everybody's getting more or 10 issues that surface in terms of, like, stadium financing 10 less the same thing. And, so, you know, that would 11 11 that -- or franchise location that, you know, that give be -- that would be a difference, or something that's 12 12 rise to economic impact studies which are kind of a sort of idiosyncratic. 13 13 macroeconomics thing, although, you know, they're not You know, at some level, you know, for some of 14 economy wide, they're, you know, focused in or 14 the -- some of the athletes are -- well, all athletes 15 15 centralized in, you know, certain locations. have some uniqueness to their set of skills and 16 You know, and there were other sorts of 16 abilities. You know, some are bigger, some are faster, 17 17 regulations that come into play, like Title IX and... some are stronger, some are more durable. You know, 18 18 But now, of course, we're getting into the some have a better feel for the game than others. And, 19 amateur sports. You know, so there's the NCAA, which 19 you know, there are some that, you know, that are kind 20 has, you know, got, you know, certain -- you know, sort 20 of superstars. And, you know, and given their skill set 21 of unique features. But nonetheless, you know, the 21 and their abilities, they make a lot of money that --22 22 tools of analysis are common to, you know, the economist and there are players that play other positions that are 23 23 tool kit, so to speak. less talented, or at least less uniquely talented. And, you know, and they make less money. And, you know, so 24 Q Are there any -- I think -- well, you 24 25 mentioned there are some idiosyncratic rules and CBAs, there are differences like that.

5 (Pages 14 to 17)

	18		20
1	Q I think you mentioned the uniqueness of a set	1	A Yeah. I mean, sure. People want to, you
2	of skills and abilities that certain players have. And	2	know, may well want to see somebody like LeBron James
3	that in professional sports, tell me if I'm accurately	3	play, even though he's playing for the visiting team.
4	characterizing what you said, that in professional	4	Sure.
5	sports, there are superstars as well; is that right?	5	Q So, given that sports has this characteristic,
6	A Yes.	6	which I won't call unique, but different then, let's
7	Q Is it fair to say that the unique set of	7	say, the Toyotas, for example, in that the ultimate
8	skills that athletes have or their fame plays an	8	consumer is the fans may care about the identity of
9	important role in the revenues generated by sports	9	the or the performance of the individual workers
10	organizations?	10	producing the product, does that give rise to any unique
11	A Yeah, sure. I mean, because I mean,	11	issues in studying sports as a field, as opposed to
12	because of fan appeal and, you know, the fans are more	12	other I'm sorry, sports as an industry as opposed to
13	willing to pay to watch some of these so-called	13	other industries?
14	superstars.	14	MR. WIDNELL: Objection, form.
15	-	15	THE WITNESS: Well, I mean, that's a specific
16	Q Exactly. A Yeah. Sure.	16	feature of the demand on the part of the fan base
			-
17	Q Does that characteristic of the product that's	17	or consumers, you know, that can influence how many
18	being created in that in professional sports, does	18	people are willing to buy tickets to watch. And
19	that one characteristic that distinguishes it from other	19	how much they're willing to pay for those tickets.
20	industries where the customers of the product don't	20	But, you know, the determination of those issues
21	really know or care who the workers are that made it,	21	depends on, you know, a host of factors in addition
22	necessarily?	22	to whether some famous superstar is there or not.
23	MR. WIDNELL: Objection, form.	23	You know, has to do with promotion and has to do
24	THE WITNESS: You mean, like when if I buy	24	with how well the team is doing, or teams, and how
25	a Toyota, I don't really have any idea who	25	close the game might be and therefore how exciting
	19		21
1	assembled the parts and who designed it and that	1	it might be to watch. And there's a whole host of
2	kind of thing?	2	things that are, you know, specific things that,
3	BY MR. SILVERMAN:	3	you know, one might want to think about when
4	Q Exactly.	4	analyzing questions in sports.
5	A And so I'm not willing to pay a premium for	5	BY MR. SILVERMAN:
6	that Toyota because some, you know, revered designer,	6	Q Changing gears for a sec. Have you testified
7	you know, sort of designed how	7	in court before as an expert witness?
8	Q Right.	8	A I have, yes.
9	A the car looked.	9	Q How many times?
10	Okay. So, that's you know, lots of	10	A My best estimate is about 25 times.
11	products that we buy are like that; right? You know,	11	Q About how many of those cases were antitrust
12	some of them some of the products, however, are	12	cases?
13	endorsed by movie stars or sports stars or, you know,	13	A Assuming that 25 is a good estimate, I would
14	people that have certain appeal to consumers. But I	14	say probably something in the order of the high teens.
15	guess your question is, you know, am I particularly	15	Maybe as much as 20, but
16	interested in going to watch the Orlando Magic play	16	That's about as good as I can do.
17	because they're playing against the Cleveland Cavaliers	17	Q And have you testified on both the plaintiff's
18	and I want to watch LeBron James play.	18	side and defense side in antitrust cases?
19	Q For example.	19	A I have, yes.
20	A Is that	20	
21		21	Q How many times have you had your deposition taken? That might be a tough one. If you can estimate.
22	Q Yeah. Well, that's part of my question. But,	22	A Probably probably about 60 times.
23	yeah, can you answer that question?	23	
	A Yeah. Sure. I mean, yeah. Of course. I		Q And how many times have you been retained by
24	mean, you know, people	24	Boies Schiller, Zuffa's attorneys in this matter?
25	Q Yeah.	25	A In any matter?

6 (Pages 18 to 21)

22 24 1 Q In any matter, yeah. 1 something that I worked on for Acushnet which is the 2 2 A All right. So, I'm hesitating because I guess title that makes Titleist golf balls. 3 the answer's twice, although the retentions were kind of 3 I don't remember any other cases. 4 4 O Okay. What was the PGA Tour case about? 5 5 A Well, this was some time ago. But it had to Q What were the two matters? 6 6 do with -- you know, there was some dispute about A Well, there was, you know, a preliminary, I 7 7 guess, investigation by the Seattle field office of the eligibility requirements for the players. So, as you 8 FTC that dealt with matters that were, you know, pretty 8 might imagine, when they put on an event -- I think this 9 much the same thing as the matters in this case. And 9 was for the -- I think this was actually for the senior 10 10 then there was this case. tour events. 11 Q Have you been retained -- other than those two 11 You know, there's only so many players they 12 matters, have you been retained as an expert witness in 12 can have in the field. And they had eligibility 13 13 requirements. And somebody was objecting to the any other cases involving the MMA industry? 14 A No. 14 eligibility requirements, I guess. I think that 15 15 Q Or combat sports? that's -- as best I can remember, that was the issue. 16 16 Q And who were you retained by in that case? A No. 17 17 A Well, it was -- I was retained by a lawyer Q Have you ever -- before working on this case, 18 18 have you ever studied combat sports? representing the PGA Tour, or the senior tour, or 19 A Not in depth. But, you know, in teaching a 19 whichever it was. 20 20 sports economics class, I made the mistake of sending Q And was the tour the defendant in that case? 21 out a questionnaire to the class asking them, in the 21 A Yes 22 beginning, what they might be interested in my making 22 O Were the claims -- were there antitrust claims 23 23 involved, if you recall? sure that I covered. And a couple of them pointed that 24 they were interested in MMA. And so I had to go find 24 A Well, you know, I don't recall specifically. 25 out something about it so that I could, you know, 25 But there were probably some antitrust claims, you know, 23 1 conduct a sensible class. 1 regarding the eligibility requirements. 2 But beyond that, I would say no. 2 Q What was the basic opinion you offered in that 3 Q What did you -- what did you research for the 3 case, if you recall? 4 purposes of your class on MMA? 4 A I don't remember. 5 5 A I don't recall at this point. Q Has any portion of your testimony ever been 6 Q Have you retained -- other than the two --6 excluded by a court? 7 this case and the other one you mentioned, have you ever 7 A There was one case where I think that the 8 been retained as an expert witness in any other cases 8 district court objected to the way that I defined a 9 9 involving other professional sports organizations? relevant market for -- well, it was a relevant market 10 10 A Okay. So there was a matter involving the PGA for the case, but it was, you know, driven by the -- you 11 Tour that I did some work on a while ago. And then 11 know, a specific hospital in a, you know, fairly 12 12 there was -- well, this didn't deal with organizations. isolated area. And, you know, I think that there was 13 But I mean, I worked on an RPM case that involved 13 some question about that that became moot because the 14 14 case that was on appeal was settled. I can't think of 15 15 Q By RPM, you mean resale price maintenance anything beyond that. 16 or... 16 Q Do you remember the name of that case? 17 17 A Yes A Not specifically, no. 18 And then there was another matter for Callaway 18 Q Was it M&M Medical Services -- some medical 19 that dealt with a dispute with the -- I forget the name 19 supplies and services versus Pleasant Valley Hospital? 20 of the organization, but it's the actors' guild, you 20 Does that sound familiar? 21 know, the union. 21 A Okay. So, I know there were some -- these 22 22 Q SAG? Is that the Screen Actors Guild? were -- there were a couple of durable medical equipment 23 A Yeah, Yeah, 23 cases that I worked on. And, you know, and one of them 24 Other than that, I don't -- I don't 24 was the case that I'm referring to. But I don't 25 25 remember -- well, there's something -- there was remember whether it was M&M specifically or not.

7 (Pages 22 to 25)

26 28 1 Q And in that case, were you offering an opinion 1 A So, initially, I was retained a couple of 2 on behalf of the plaintiff? 2 years ago to -- and at that time, what was ongoing was A Yes. 3 3 the class action was in its infancy so that that action 4 Q If we turn back to your report and look at 4 was -- you know, had been filed, but, you know, I don't 5 paragraph eight. The section is titled "assignment." 5 think that there was a whole lot of activity at that 6 And you write that your assignment was to review the 6 point, although there may have been. The major focus of 7 7 report -- the expert report of Andrew Zimbalist and to my effort at that time was on the FTC matter. 8 8 provide your economic evaluation of his analyses and And then, you know, and then there was a long 9 form expert opinions of his analyses. And you also say 9 lull, in which I didn't do anything at all. And then, 10 that you were asked to analyze UFC compensation, taking |10>you know, recently, I was asked to prepare a report in 11 into account the athlete's experience as an athlete. 11 this case 12 Was that the entire scope of your assignment? 12 O What work did you do in the FTC matter? 13 13 A As I recall, yes. A Well, the FTC, you know, I wasn't -- I didn't 14 Q And you mentioned that your colleague, is it 14 participate in a lot of meetings. I went to one, you 15 15 Dr. Durrance? know, where there was a presentation. And prior to that 16 A Yes. 16 meeting with the FTC, the FTC, as I recall -- it was a 17 Q And that she assisted you and you also 17 couple years ago. But as I recall, they sent to Zuffa's 18 mentioned in your report that OSKR staff assisted you; 18 attorneys a list of items that they were interested in 19 is that right? 19 gaining some understanding of or gaining some 20 20 A Yes. Yes. That's correct. information on. And I, you know, worked on putting 21 Q What is OSKR? 21 together the information and participating in the 22 A It's a consulting firm located in -- I forget 22 meeting with the FTC field office to discuss the items 23 where exactly. I always think of them as being in 23 that they were interested in and to provide the 24 Berkeley, but they're not actually in Berkeley, I don't 24 information that I've been able to put together at that 25 believe. California, that is. 25 time. 27 29 1 Q Are you affiliated with OSKR? 1 Q Did you produce a report for the FTC? 2 2 A You know, sort of. I mean, it's not -- I I am not. 3 Who at OSKR did you work with? 3 mean, I wouldn't actually call it a report. But there 4 A Andy Schwarz and Colin Weaver. 4 was, you know, sort of an outline of points that -- and 5 5 Q Who retained OSKR to assist you? then there were some, you know, like illustrations or 6 A I'm not sure who did. I didn't retain them 6 figures to -- that addressed specific issues that the 7 7 and they didn't retain me. FTC had raised. 8 Q Have you worked with them before? 8 Q Did you draw upon that work that you had done 9 9 for the FTC in your report that you submitted in this 10 10 Q Do you know who paid OSKR's bills? 11 11 A I don't know for a fact, no. A No. I started over again. 12 Q And in this case, have you been compensated by 12 Q How many hours did you spend preparing your 13 **Zuffa or OSKR?** 13 report in this case? 14 A So, administratively, what I do is submit 14 A Okay. That's a good question. 15 15 bills to OSKR. And, you know, then they deal with So, in the actual preparation of the report --16 whoever's paying the bills to get me paid. And I'm 16 and by that, I'm talking about, you know, all of the 17 17 assuming that it's Zuffa, but, you know, I don't -- I work that I did. I don't mean just the writing of the 18 don't know for a fact. 18 report, but what I had to do. So, for example, you 19 Q Did OSKR perform any analyses for you that 19 know, in preparing the report, I was -- I read 20 informed the opinions in your report? 20 Dr. Zimbalist's report; right? So that's -- I consider 21 21 A Well, they put together some information for that part of the preparation. Is that okay? 22 22 me that, you know, that was useful. You know, they Q Sure. 23 23 A Okay. So, in that regard, my best estimate of were -- whatever number crunching was involved, they 24 24 how much time I spent, that is about 60 hours. Now, I 25 25 want to qualify that in this sense. That's what I felt, Q When were you retained by Zuffa in this case?

8 (Pages 26 to 29)

30 32 1 you know, was reasonable for me to bill, the time that I 1 And I just thought that out of curiosity is, you know, 2 2 felt was okay to bill for. it's somebody interested in sports, generally. But, in 3 Now, and the reason why I say that is that, 3 connection with this specific case, I didn't really look 4 you know, when I work on some of these issues, you know, 4 at that, no. I mean, other than, you know, there was 5 the issues are sort of always swarming around to one 5 some description of that evolution in Dr. Zimbalist's 6 degree or another in my head. But if I'm thinking 6 report. So, but I mean, I wasn't studying it to -- for 7 7 about, you know, something that, you know, that I've the purposes of figuring out what the evolution was. 8 8 read at some point, or something like that, I'm just Q In preparing your report, did you consider any 9 sort of thinking about that while I'm riding into the 9 materials involving the reserve system that existed 10 10 university or if I'm taking a shower or, you know, on an before or, you know, prior to 2011? 11 exercise bike or something, I don't bill for that time. 11 MR. WIDNELL: Are you asking about materials 12 12 So there's a lot of time I actually spend that I that he relied on in the report? 13 can't -- that I never bill for. I mean, I don't know. 13 MR. SILVERMAN: Yes. Let's put that. Let's 14 Maybe other people do, but I don't. 14 put the question that. Yeah. 15 15 And, so, it was more than 60 hours of, you THE WITNESS: Okay. So, are you talking about 16 16 know, of effort. But, you know, but 60 hours is the reserve system that was, you know, sort of in 17 probably about as close as I can come to the amount of 17 place prior to collective bargaining? Or are you 18 18 time that I actually billed for the preparation of the talking about the reserve system or parts of it 19 report. 19 that survived the advent of collective bargaining? 20 20 Q Did you or your staff perform any analyses BY MR. SILVERMAN: 21 which you decided not to put in your report? 21 Q I'm talking about either of those things 22 A Not that come to mind, no. 22 pre-2011. 23 23 Q Do you know how much time OSKR billed in A Okay. Well, with -- you know in connection 24 connection with preparing your report? 24 with this matter, I think that the answer to that is no, 25 A I have no idea. 25 that I did not look at, you know, didn't consider that 33 31 1 O How about Dr. Durrance? 1 in particular. You know, I mean, I've -- but, you know, 2 2 but generally speaking, you know, I've paid attention A I don't know how much time. I would guess she 3 probably spent around the same amount of time that I 3 to, you know, the reserve clause that had been in 4 did. But I can't say that with certainty. 4 baseball for, like, a hundred years before it got kind 5 5 of squashed by a mediator. But not in connection with Q If we turn to appendix C of your report, which 6 6 the matters in this report. I believe lists the materials you considered. On the 7 7 Q I believe you asked for an extension of time second page of appendix C -- first, am I right that 8 appendix C is the materials that you considered in 8 to prepare your report in this case; is that right? 9 9 preparing your report? A The -- I asked the attorneys if I could get an 10 10 extension on the due date, yes. A I believe so, yes. 11 11 Q Can you tell us what the reason was you needed Q On the second page, it lists collective 12 bargaining agreements. And it lists a series of, I 12 an extension of time? 13 13 A I didn't think I could complete the report by guess, Major League Baseball, NBA, NFL, and NHL 14 collective bargaining agreements starting in 2001. But 14 the due date. 15 15 Q Did you write the book "Monopsony in Law and there's less six of them total. In preparing your 16 report, did you study how any of the CBAs in these 16 Economics"? Or a book entitled "Monopsony in Law and 17 17 professional sports evolved before 2011? Economics"? 18 A Not -- not in -- not in connection with any 18 A Well, not by myself. You know, Jeff Harrison 19 19 was co-author of that book. issue in this case. I mean, I've thought about the 20 20 Q I'm going to mark as Blair Exhibit 3. evolution of collective bargaining over, you know, from 21 21 the time that it began to surface in, you know, these (Exhibit 3 was marked.) 22 22 major league sports. But, you know, I was thinking BY MR. SILVERMAN: 23 23 about that in, you know, connection with, you know, Q This is some select excerpts from that book 24 writing the book that I did and teaching the course that 24 that I'd like to go over with you. 25 25 I taught, and, you know, things like that, you know. I apologize for the markings. The copy of the

9 (Pages 30 to 33)

114 116 1 But, you know, one of the things that we're 1 I'm sorry, how long does it take to get from that 2 2 equilibrium one to equilibrium two. And we don't implicitly assuming is that all units of the input 3 are homogenous so that, you know, whoever, you 3 really -- we don't really have much to say, 4 know, you know, widgits are the same thing and 4 theoretically, about any kind of variations that 5 they're identical. And now, it may be that in 5 may exist during that transition period. 6 6 order to get more of them, you have to up the Now, one would expect, once you get into 7 7 price. But that doesn't mean that they somehow equilibrium, again, that the terms would be, if not 8 8 become different then. They'll still provide, you identical, they would be the value of the total 9 know, the quality and, you know, in every dimension 9 compensation -- bundle of compensation would have 10 10 to be valued pretty much the same by the is the same. 11 The other thing is that, you know, that model 11 individual -- if we're talking about labor, the 12 12 is a kind of, you know, spot market model in the individual workers, if they're -- if they have 13 sense that, you know, we're talking about, you 13 identical skills so that this model is really 14 know, I'm going to buy, you know, rolls of copper 14 appropriate, then, you know, it may well be that, 15 15 you know, I'm -- I'm more risk averse than you are. wire because, you know, for, you know, an 16 16 electrical contracting company. And in looking at So when I am trying to land a job, I want some 17 that, you know, I'm going to -- you know, the issue 17 protection. 18 18 is, I'm going to buy five rolls instead of four Now, you can't get protection for nothing. So 19 and, you know, what does that do and, you know, 19 the value of this set of terms, you know, I may get 20 20 and, you know, but the transaction's taking place, less in retirement benefits. I may get less in, 21 bang, all at once. You know, now, that's not true 21 you know, perhaps vacation time. I may get less in 22 in, you know, what you're talking about because 22 terms of, you know, monthly salary or something. 23 23 But in exchange for that, I get some protection you're talking about, you know, contracts that 24 have, you know, some inter-temporal dimension to 24 against, you know, being unemployed or, you know, 25 them. And -- now, and then when we start to talk 25 losing benefits if I get injured or something like 117 1 about some of these terms, you know, one would 1 that. 2 2 You know, on the other hand, somebody that is expect -- maybe -- maybe not -- maybe not less risk averse doesn't value those protections as 3 initially, but you would expect the terms to wind 3 4 up being roughly the same, you know, in a market, 4 much as I do and, you know, and doesn't want them, 5 and, you know, may take a different set of terms you know, just through adjustments over time as you 6 move to an equilibrium. You know, again, now, you that might involve, you know, higher salary or, you 7 7 know, some higher monetary benefit and, you know, know, I don't think that we've -- we emphasized 8 this enough when we teach economics, that most of 8 as trade-off against absorbing more of the risk. 9 9 the models that we talk about are equilibrium So it's hard to -- it's hard to say exactly 10 10 what's going to happen in that regard. models. So I can tell you that, you know, we start 11 11 MR. SILVERMAN: Yeah. Why don't we take a from competition, and now you say to me, okay, so, 12 for example, in one of the things that we were 12 break. We have to change the tape. 13 looking at before, you know, we started out with 13 THE VIDEOGRAPHER: This is the end of media 14 14 competition and there was a whole bunch of mergers unit number two to be continued on media unit 15 15 number three. 12:18 p.m., off the record. and that created a dominant firm. 16 And then we want to say, okay. So, now, let's 16 (A luncheon recess is had from 12:18 p.m. to 17 17 compare what happens with this dominant firm in a 1:14 p.m.) 18 18 fringe to what we started with. Well, what we THE VIDEOGRAPHER: Here begins media unit 19 never tell you about is how you get from that 19 number three in the continued deposition of 20 20 competitive equilibrium to the new dominant firm Roger D. Blair. We're going back on the record at 21 21 equilibrium. And in between -- I mean, first of 1:14 p.m. 22 22 BY MR. SILVERMAN: all, as economists -- now, some labor economists 23 23 Q Welcome back. I would like to turn your may actually look at this and try to estimate this 24 adjustment process. But by and large, you know, we 24 attention back to the -- your textbook, "Sports 25 Economics," that we were looking at before. And on page don't really focus on how long does it get to --

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120 118 1 343 of that book, you write in a section called Demand 1 Q Okay. Is the demand for fighter talent in MMA 2 2 derived from the fans' demand for watching MMA events for Athletic Talent, [as read]: We begin our analysis 3 3 of the sports labor market by assuming that it is featuring those fighters? 4 competitively structured. For the most part, however, 4 MR. WIDNELL: Objection, form. 5 sports labor markets are not competitive. Nonetheless, 5 THE WITNESS: Well, it may not be those 6 the competitive model provides a useful benchmark for 6 fighters, but the demand for MMA talent is -- you 7 7 comparison with the actual results. In addition, it know, is a derived demand from -- it's derived from 8 8 introduces a way of measuring a player's value to his the demand by fans for watching MMA bouts. 9 club. Athletes are employees of their respective clubs 9 BY MR. SILVERMAN: 10 10 Q Given that MMA is an individual sport which which are business firms that produce athletic 11 11 competition that is sold to the fans. We begin our pits certain fighters against other fighters, is it 12 analysis with the principles that drive the employment 12 possible that fans have very different levels of demand 13 13 for bouts featuring certain fighters rather than others? decisions of profit maximizing firms. In general, labor 14 is an input in the production process. No one demands 14 MR. WIDNELL: Objection, form. 15 15 THE WITNESS: Sure. labor services for their own sake. Instead, labor is 16 16 BY MR. SILVERMAN: demanded because it can be used to produce something 17 that the employer can sell. Consequently, the demand 17 Q Have you analyzed how much fan demand is 18 18 affected by the particular fighters who appear in an MMA for labor is a derived demand. It is derived from the 19 demand for the output that the labor is used to produce. 19 event? 20 20 In the sports business, players, coaches, and managers A Not specifically, no. 21 are employed by their clubs to produce athletic 21 Q I think we covered this, but in a competitive 22 22 market, an employer pays their employees the marginal competition which is what the clubs sell to the fans. 23 23 The demand for athletic talent is derived from the fans' revenue product of their labor; is that right? 24 demand for watching the games that the athletes play. 2.4 A Yeah. In a competitive market, the firm is 25 So, can you explain for me -- well, let me 25 going to expand employment to the point where the 119 121 1 1 marginal revenue product is equal to the wage that is, start by asking, do you agree that labor is a derived 2 2 you know, comes from the demand and supply in the market demand? 3 MR. WIDNELL: Objection, form. 3 as a whole. 4 THE WITNESS: I think you misspoke slightly. 4 Q And so then the wage that that firm pays will 5 5 BY MR. SILVERMAN: equal that margin revenue product; is that right? 6 6 A Yes. And assuming that the -- that we're in a O Sorry. Yeah. 7 7 Do you mean that -- scratch that. Let me ask profit maximizing equilibrium, that is that the firm has 8 the question again. 8 been successful in actually maximizing profit. And when 9 9 Do you agree that the demand for labor is a that's the case, the marginal revenue product will be 10 10 equal to their wage. derived demand, it is derived from the demand for the 11 11 output that the labor is used to produce? O And we discussed how a monopsonist pays 12 A Yes. 12 something less than the marginal revenue product of 13 Q Okay. What is the output that the UFC 13 labor; right? 14 produces using the athlete's labor in MMA? 14 A Yes. 15 15 A It provides -- what it's supplying are, you Q And that leads to a transfer of surplus from 16 know, events that consist of a number of bouts, MMA 16 the worker to the monopsonist; right? 17 17 A Relative to the competitive solution, yes, 18 18 Q Do you agree that with this quote that I just that's correct 19 read, that the demand for athletic talent is derived 19 Q At page 345 of your textbook, you write [as 20 20 from the fans' demand for watching the games that the read]: A professional team's focus on marginal revenue 21 21 athletes play? product is illustrated by the Cincinnati Reds' 22 22 A Yeah. That's the same question. assessment of Ken Griffey, Jr.'s presence in 2000. The 23 23 team expected to gain 20 million in new revenues due to Q Yeah. Essentially. 24 Just specific to sports and fans, I guess. 24 his presence in the line-up. Attendance rose by some 25 25 500,000 fans during the 2000 season which translated A Yes.

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122 124 1 into 16 million in additional gate receipts and 1 MR. WIDNELL: Objection, form. 2 2 THE WITNESS: Well, that's certainly one of concession revenues. Merchandise sales rose another 3 3 the -- you know, one of the benefits; right? I 1.9 million. Arguably, Griffey's marginal revenue 4 product, or MRP was nearly 18 million which was less 4 mean, presumably, with Ken Griffey, Jr., you were 5 than the Reds had hoped for, but more than Griffey was 5 getting, you know, one of the best baseball players 6 paid, which was 7 million. 6 that ever lived. And, you know, that would do a 7 7 Does this paragraph illustrate the sort of couple of things to -- in terms of benefits for the 8 8 analysis that an economist would engage in to try to team. I mean, number one, just because, you know, 9 estimate an athlete's marginal revenue product? 9 he was a remarkable player and people would be 10 MR. WIDNELL: Objection, form. 10 interested in watching him play. You know, that 11 THE WITNESS: I don't know if you would do 11 would have a positive effect. But in addition to 12 12 that on -- I don't know if you could do that on a that, you know, because of his talent, they should 13 very broad basis. What I was trying to do --13 have won -- all else being equal, they should have 14 that's an illustration. And, you know, what it 14 won more games --15 15 indicates, of course, is that Griffey didn't do a BY MR. SILVERMAN: 16 good job bargaining for, you know, for his salary 16 Q Um-hum. 17 because he wound up getting substantially less than 17 A -- as a result. And that usually makes the 18 what one might think was the -- his marginal 18 fans happier and, you know, and might well lead to some 19 revenue product. 19 additional attendance as well. But, you know -- but, 20 20 Now, as an illustration of -- you know, that again, what you would want to be sure is that you're 21 general idea of looking at marginal revenue 21 taking into account other sources of those changes. If 22 products, it got those -- there's a source for, you 22 you're just looking at the change in attendance from one 23 23 know, where I got the information in order to write year to the next, it's 500,000 fans. And you say, well, 24 24 up that. You know, if you were looking at, you we added Griffey. Well, if you attribute all of that 25 25 know, marginal revenue products, you know, more increase to Ken Griffey, Jr., that might be a mistake 123 125 1 generally, you might want to -- to see whether that 1 because, you know, we'd have to take into account what 2 increase in attendance of 500,000 was motivated by 2 else happened. I mean, there may well have been, you 3 something else. I mean, you know, Griffey may not 3 know, a change in economic conditions that led to, you 4 have been the only player that was attracting fan know, fans spending more money on going to baseball 5 5 games. It could have been, you know, any number of attention. You know, it could have been that the 6 ball club had invested in, you know, other 6 things, as I mentioned before. 7 promotional activities that led to increased 7 BY MR. SILVERMAN: 8 attendance, at least in part. I mean, I wouldn't 8 Q Is this -- it sounds like you're -- it sounds 9 9 say that Griffey had nothing to do with it, but, like you're pointing out a correlation causation issue 10 10 you know. with this example; is that right? 11 11 And, so, if you were looking at this in, you A Not entirely. I mean, to some extent, it is a 12 know, a broader context, than just to provide an 12 distinction between correlation and causation. But 13 illustration for students, you know, you would 13 it's -- you know, I would feel comfortable -- you know, 14 probably want to look at some other things as well. 14 if everything else was constant, which is, you know, 15 BY MR. SILVERMAN: 15 sort of hard to, you know, find situations like that 16 Q So I understand, you're saying it can be --16 empirically. But if everything else was constant and, 17 17 you know, this is just an illustration and it's not you know, the only real difference that you can see is 18 18 obvious to that you can attribute, you know, 500,000 that Ken Griffey, Jr., is now playing right field or 19 wherever he was playing, instead of somebody else, then, fans, specifically, to Griffey, for example. But is 19 20 20 you know, I wouldn't feel uncomfortable attributing the -- is the method of analysis correct in the sense 21 that to measure the marginal revenue product of an 21 causation to the increase in attendance being due to Ken 22 22 athlete, one acceptable way to approach that problem Griffey, Jr. It's just that if you're going to try to 23 23 would be to try to measure the additional -- the number do that, you still have to control for all the other 24 of additional fans that that athlete brings to their 24 things that actually aren't constant. Because, you 25 25 employer, essentially? know, in -- you know, real empirical settings, you know,

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126 128 1 there's a lot -- there are a lot of things that are 1 for a sports organization is generally related to the 2 2 changing. And you have to try to control for them. And number of fans who buy tickets or gate receipts, 3 some of them are going in opposite directions. 3 concession revenues, merchandise sales, licensing rights 4 4 for television. Those are the main types or sources of 5 A You know, you might have lost somebody that, 5 revenue that, that an athlete would generate for a 6 you know, somebody may have retired or quit that was, 6 sports organization; is that right? 7 7 you know, a fan favorite. And, you know, I can't go MR. WIDNELL: Objection, form. 8 8 THE WITNESS: Parking. Yeah. Parking, watch that guy and I don't really care about Ken 9 Griffey, Jr. I mean, you know, I would, personally, 9 concessions, gate receipts. You know, the 10 10 but, you know. broadcast licensing, you know, differs from league 11 Q Right. 11 to league -- right? -- because of the way they 12 12 A But, hypothetically, I might not care about handle that. You know, there's more local stuff in 13 him, but I care about this other guy, and so I stopped 13 baseball, for example, than in football, whatever. 14 going to the games. And, you know, so, that means that, 14 You know, pretty much you've got national contracts 15 15 you know, that Ken Griffey, Jr., offset that loss as that, you know, they're league-wide. And, you 16 16 know, so that's -- you know, that's somewhat well as having some impact on, you know, positive impact 17 on the total attendance. But, again, you know, you have 17 different, but, yeah, I mean, sure. Jersey sales, 18 18 any kind of souvenirs and that kind of stuff. to look to see, you know, do we have a new manager, do 19 we have, you know, some, you know, rookie phenom 19 BY MR. SILVERMAN: 20 20 that's --Q And, so, it's fair to say that Ken 21 Q Right. 21 Griffey, Jr.'s ability to put fans in the seats paying 22 A -- come into play. 22 for tickets and concession and merchandise and all of 23 23 Q So abstract -- but abstracting away from these things, that made him more valuable to the 24 24 Cincinnati Reds; right? the -- from the empirical measurement difficulties, 25 which I understand you to be talking about, just asking 25 A I wouldn't say it made him more valuable. It 129 1 made him valuable -conceptually, what is it we're trying to measure, when 1 2 2 we're trying to measure an athlete's marginal revenue Q Right. 3 product? So, for example, is it fair to say that, 3 A -- to the Cincinnati Reds. 4 assuming it's possible, maybe there's no -- maybe 4 Q Or his value was related to his ability to do 5 there's no empirical experiment that would let you do 5 those things, essentially? 6 6 A Yes, that's correct. this. But assuming it's possible, holding all other 7 7 things equal, essentially the question you're trying to Q So, players who can generate more ticket sales 8 ask is, how much revenue that this organization 8 generate more revenue because they generate more fan 9 9 generates can be attributed directly to the efforts of interest. Those players are also generally paid more; 10 10 this -- of this athlete. Is that fair? right? 11 11 MR. WIDNELL: Objection, form. MR. WIDNELL: Objection, form. 12 THE WITNESS: Yeah. I mean, you're trying to 12 THE WITNESS: You mean, they're paid more than 13 look at the -- you know, the marginal benefit of, 13 other athletes that don't have the same level fan 14 you know, of that athlete's contribution. 14 appeal. 15 15 BY MR. SILVERMAN: BY MR. SILVERMAN: 16 O Um-hum. 16 Q That's right. That's my question. 17 17 A Yes. MR. WIDNELL: Same objection. 18 18 THE WITNESS: I think generally that would be Q And, in the sports context, the marginal 19 19 benefit of that athlete's contribution is going to 20 20 Well, let me modify that. I mean, so, you manifest it -- well, it's revenue. We're talking about 21 revenue to the organization ultimately; right? 21 know, as a broad statement, I think, that that's, 22 22 A Well, ultimately what they're interested in is that's probably correct. Now in, you know, Major 23 23 profit -- right? -- but revenue's part of that; right? League Baseball, for example, you know, the -- you 24 24 know, the rookie contracts don't provide for any 25 25 Q And, and, that revenue in the sports context free agency for six years. And, so, in the

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130 132 1 first -- especially in the first three years before 1 at the -- looking at baseball, for example -- and I'll 2 2 the players are eligible for final offer get more -- more into the details of this later. But 3 3 arbitration, you know, they get paid -- it almost you've mentioned that depending on the seniority of the 4 doesn't matter how popular they are. The teams 4 player and various other rules, some players aren't free 5 don't have to pay them much. And so you saw 5 agents or they're restricted free agents of some sort; 6 players like Kris Bryant for the Cubs and Mike 6 is that right? 7 7 Trout for the Angels getting paid, you know, 4- or A Yes. 8 8 \$500,000. When their contribution -- I haven't Q And in your opinion from your experience 9 done any calculations, but I'm convinced, you know, 9 studying baseball, is it true that players who aren't 10 10 would have been far above that. free agents who don't have full free agency are 11 11 So -- and then even when they're eligible for generally paid a smaller -- a smaller proportion of 12 12 final offer arbitration, you know, I think that the their marginal revenue product than the free agents? 13 13 A Yes. estimates I've seen suggest that the outcome of the 14 final arbitration, you know, if you actually go 14 Q Why is that? Can you explain why that is? 15 15 through the arbitration, that the -- the values A Well, you know, we talked about this, you 16 16 know, before lunch. You know, when the player -- you tend to be, on average, a little somewhat below the 17 marginal revenue products, although they're 17 know, if you have a player that's in his second year in 18 18 the major leagues, you know, he's had a good rookie reasonably close. 19 So, the statement that I was sort of agreeing 19 season and he goes and he talks to the general manager 20 20 with was for free agents. and, you know, along with his agent, and they're 21 BY MR. SILVERMAN: 21 bragging about what a great job he did, and the team 22 22 agrees and gives them a \$10,000 raise or, you know, Q Gotcha. So, for free agents, their marginal 23 23 revenue product -- strike that. whatever is permissible under the collective bargaining 24 24 agreement. For free agents, their wage approaches their 25 marginal revenue product whereas it might not for 25 But the player, in bargaining, you know, the 133 1 players whose mobility is restricted; is that right? 1 player's next best alternative is not very good, 2 A Yeah. I mean, now, you know, there's a 2 relative to what he's being offered. Right? So they 3 bargaining element in there. And so, you know, you get 3 have to pay -- let's say they have to pay him at least 4 a range of outcomes. So it may not be exactly that. 4 \$450,000 under the terms of the -- you know, the 5 But, you know, it should be -- it should be reasonably 5 collective bargaining agreement. They don't have to go 6 close. Because you've got -- usually you have an 6 much above that because for most baseball players --7 7 experienced agent representing the player who's well, for most people, \$450,000 is a lot more than the 8 bargaining with an experienced employer. And so they 8 next best alternative. So, that tilts the bargaining 9 9 kind of know -- both sides know what's going on. It's power in favor of the team. And, you know, they're 10 10 not like the experienced employer can take advantage of not -- they just don't have to pay much more than, you 11 some, you know, player that's, you know, inexperienced 11 know, than what's being -- you know, what's either in 12 and doesn't know how to bargain. You know, usually 12 the collective bargaining agreement or some nominal 13 they -- especially the really good players have got very 13 increase above the minimum salary or, you know, 14 experienced agents who, you know, are a reasonable match 14 whatever. 15 15 for the employers. Q Is it fair to say that for most professional 16 Q So, in the league sports, I think you said in 16 athletes, at least in -- that's, you know, baseball, 17 17 the league sports, for free agents, they are, in your football, basketball, hockey in the United States, 18 18 opinion, paid something close to their marginal revenue alternative employment options outside of their 19 19 product? particular professional sport aren't a reasonable 20 MR. WIDNELL: Objection, form. 20 substitute? 21 21 THE WITNESS: Yeah. Aside from some frictions MR. WIDNELL: Objection, form. 22 22 and whatnot that arise during the bargaining THE WITNESS: Well, of course, it depends on 23 23 process, yes. what we mean by reasonable substitute. 24 BY MR. SILVERMAN: 24 Now, if, you know, you know, if you're a 25 25 Q But, in those same league sports, like looking talented left tackle, you know, in the National

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134 136 1 Football League, you know, you may command, you 1 do that profitably, which means that not so many 2 2 know, millions of dollars in annual salary because, people would walk away that, you know, that it --3 3 as a free agent, you can negotiate with various that it would be -- become unprofitable. 4 4 I mean, to some extent, I guess, you could --5 And, so, what would that -- if that left 5 you could look at it that way. 6 tackle stopped playing football, you know, what 6 BY MR. SILVERMAN: 7 7 else would that person do? Well, it depends on the Q Going back to earlier, I think you said that 8 8 person, of course. You know, we don't know what in baseball, free agents are, today, I think we were 9 the alternatives actually are, you know. Maybe the 9 talking about today, are paid something close to their 10 10 guy would be a rock singer and maybe make more marginal revenue product, and that younger players or 11 money, but, you know, or maybe he would be a high 11 players who aren't free agents are probably paid 12 12 school football coach and make a whole lot less something less than their marginal revenue product. 13 money. You know, it just -- you know, it depends 13 Is the same thing true for the other three 14 on the individual what the -- what the alternative 14 major sports: Hockey, football, and basketball, in the 15 15 **U.S.?** employment opportunities are. 16 16 BY MR. SILVERMAN: MR. WIDNELL: Objection, form. 17 O Well, what if we look -- I mean, if we talk 17 THE WITNESS: Well, they've got -- you know, 18 18 about this in the terms of the DOJ and FTC, horizontal so these sports vary in terms of what happens for 19 merger guidelines, for example, and they talk about 19 the entry-level players. So, the contracts are --20 20 reasonable substitutes. And I think they ask the you know, the terms of the contracts and the 21 question, well, if a hypothetical, in this case, 21 restrictiveness of the free agency is, you know, 22 monopsonist, controlled -- let's say if we're talking 22 varies in football, depending upon what round you 23 23 about football -- all of the teams in the NFL, which got drafted in. 24 24 could be accomplished in reality by them all just You know, I don't know about basketball. I'm 25 colluding with each other, as essentially they did under 25 just not sure about the details of those, those 137 1 1 leagues. the reserve clause, could they profitably suppress the 2 2 BY MR. SILVERMAN: wage below the competitive level; right? Does that --3 is that a reasonable way of assessing this question of, 3 Q I guess to just abstract out a little bit away 4 well, are other -- are other jobs for the player a 4 from the details of the restricted free agency in 5 5 various leagues, is it fair to say that -- that while reasonable substitute? 6 6 MR. WIDNELL: Objection, form, misstates. the details varied by the type of player, potentially, 7 7 THE WITNESS: Well, to some extent, that's and the league, that all of them impose on some set of 8 accepting the DOJ and FTC's interpretation of some players some limitation on mobility so they're not a 9 9 meaningful deviation in the compensation. complete free agent for some substantive players; is 10 10 Usually it's expressed in terms of elevating that right? 11 11 the price. Here, we're talking about depressing A That's my understanding, yes. 12 the price. And, you know, when they, in 12 Q As a matter of economic theory, does it make 13 13 sense that those players, due to those restrictions, practice -- what they talk about under certain 14 14 conditions, implies elasticities of something like would make something less than a full free agent, as 15 15 compared to their marginal revenue product, some smaller 20, and it's really hard to find products that 16 are -- you know, where you actually have an 16 percentage of their marginal revenue product than a full 17 17 elasticity of 20. free agent? 18 18 MR. WIDNELL: Objection, form. So, but, I understand what you're talking 19 19 THE WITNESS: You know, so, there are other -about. You're talking about, you know, you have 20 20 there are other aspects of that; right? this hypothetical monopsonist that controlled all 21 21 employment options for labor that fits into a So, they've got -- you know, originally -- not 22 22 certain category. You know, could they depress the originally. Before the last change in football, 23 23 the first round draft picks got salaries that wage by something on the order of five or 24 ten percent, I suppose, for a non-transitory amount 24 probably far exceeded their marginal revenue 25 25 product. of time, and would that -- you know, and could they

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138 140 1 Now, now, what they've done in the last 1 then, a player dealt with a pure monopsonist. There was 2 2 agreement -- see, they put some limitations on no one else who could or would bid for his services. 3 3 the -- how much a team can pay those early round For most premier athletes, there are no alternative 4 draft picks. Nonetheless, we've seen some examples 4 occupations that are even close in terms of 5 in the last couple years of first-round draft picks 5 compensation. A few athletes can play other sports and 6 that were not ready to play. There was -- I forget 6 can predibly -- can credibly threaten to go elsewhere, 7 7 one of the quarterbacks was not ready to play. And but not many. 8 8 he basically didn't play much at all his rookie Do you agree, that as far as most premier 9 season. But he still made millions of dollars. 9 athletes are concerned, there are no alternative 10 10 And so, you know, in that case, he must have been occupations that are even close in terms of compensation 11 paid far more than his marginal revenue product for 11 compared to their professional sport? 12 12 that year because he wasn't -- you know, it wasn't A For most of them, yes. 13 13 that he wasn't contributing anything, but, you You know, there are exceptions like Bo Jackson 14 know, basically he wasn't playing. And, you know, 14 and -- God, I'm drawing a blank on some of the other 15 15 if he's sitting on the bench, fans aren't coming names. But, you know, there are other people that 16 16 played multiple -- actually played at the highest out to watch him sit on the bench. 17 17 So, you know, I can't completely agree with level --18 18 what you're saying. Q Right. 19 You know, in basketball -- sorry about that. 19 A -- in, you know, various sports. 20 20 You know, in basketball, you know, I think that Q But just a few exceptions generally; right? 21 there's -- I think there's some limitations as 21 MR. WIDNELL: Objection, form. 22 22 THE WITNESS: Yeah. There aren't very many, well. Ordinarily, in basketball, it seems like 23 23 they don't have -- they don't -- people who aren't no. 24 24 BY MR. SILVERMAN: ready to play don't get drafted very highly, and 25 25 therefore, you don't have those same examples that Q So, I mean, you talk here in the same 141 1 you find in football. And then I'm just not much 1 paragraph about -- about -- I'll read what you write. 2 of a hockey fan, so I don't know much about hockey. 2 [As read]: Michael Jordan, arguably the best basketball 3 BY MR. SILVERMAN: 3 player of all time, tried his hand at baseball. He was 4 Q And, for the NFL and for basketball, when 4 mediocre and could not play at the major league level. 5 5 players are restricted free agents, the period of time And then you conclude, most successful, professional 6 when they were restricted free agents, does it make 6 athletes stick to one sport. 7 7 economic sense that they would get paid a lower Does that sound right? 8 8 proportion of their marginal revenue product than if A Yeah. I mean, there's people, like, as I say, 9 9 they were full free agents? Bo Jackson, Danny Ainge played basketball and pro 10 MR. WIDNELL: Objection, form. 10 baseball 11 THE WITNESS: I'd have to -- you know, I 11 Again, you know, there are a couple of others, 12 haven't looked at the -- you know, the specifics of 12 but, yeah, I mean, most of the -- you know, so, for 13 the impact of being a restricted free agent as 13 example, I mean, you didn't see Tom Brady trying his 14 opposed to a free agent. And without having some 14 hand at baseball or basketball. 15 15 specifics regarding any limitations, I have a hard Q Right. And if he did, he'd probably get paid 16 time answering that question, sorry. 16 a lot less; right? 17 BY MR. SILVERMAN: 17 A He probably wouldn't get paid anything at all. 18 18 Q If we look at page 350 of your textbook, under Q On the next page, page 351, you write [as 19 the reserve clause, you write [as read]: As we saw in 19 read]: With the demise of the reserves -- reserve 20 20 the discussion of competitive balance, the reserve clause, players gain the measure of freedom. There are 21 clause in the standard player contract bound a team to 21 still some limits which are part of the collective 22 one -- excuse me, bound a player to one team for as long 22 bargaining agreement. But there are completely 23 23 as that team wanted to employ the player's services. unrestricted free agents in all major league sports. 24 The player's only alternative was to retire from the 24 Free agents should get the benefit of competition for 25 25 league and change occupations. Once under contract those services which would mean higher salaries. Faced

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142 144 1 with that prospect, owners have simply colluded at times 1 And that kept, you know, compensation down, or whatever 2 to avoid competing in the player market. it was they were fighting over at the time. So that, 3 3 you know, there were episodes where there's collusion. Is that accurate? 4 A I believe so, yes. 4 And, you know, and then you don't get the results that 5 Q And the limits that are placed on free agency 5 you would expect to get in the absence of collusion. 6 in the major league sports, those are the result of 6 Q And you talked earlier about the abstract 7 7 collective bargaining between the players' union and the model of monopsony and how monopsony leads to -- in 8 team owners; right? 8 labor markets, at least leads to workers getting paid 9 A Yes. 9 something below their marginal revenue product. And 10 10 Q What did you mean in this paragraph that I that that leads to socially non-optimal outcomes. 11 just read when you said -- or when you wrote [as read]: 11 Is the same thing true in sports? 12 Free agents should get the benefit of competition for 12 MR. WIDNELL: Objection, form. 13 their services, which would mean higher salaries? If 13 THE WITNESS: Well, in the first part, you 14 vou recall? 14 know, what leads to social welfare loss is not the 15 A You mean, why did I say "should" in some sort 15 depressed wage, but the restricted employment. 16 16 of normative sense? Because, by restricting the employment, what you're 17 Q Yeah, normative sense. Is it better that free 17 doing is you're failing to employ inputs where the 18 18 agents get the benefit of competition for those value of using them in producing the product is 19 services? 19 higher than the social cost of their being 20 MR. WIDNELL: Objection, form. 20 employed, which is measured by the height of the 21 BY MR. SILVERMAN: 21 supply curve. 22 22 So that's what causes that. What happens with O Or is that what you meant? 23 23 A I guess, you know, if you think about what the depressed wage in that case is that there's a 24 else we're talking about by collusions, so, you know, in 24 transfer of what ordinarily would have been 25 25 the absence of collusion, you would expect that they supplier surplus or producer surplus, you know, 143 145 1 would get -- and again, this comes out of, you know, 1 whatever term we want to apply to that in a labor 2 2 there could be some frictions in the bargaining process market. You know, and that gets transferred to the 3 and that kind of thing that would -- would lead to some 3 employers in the form of higher profits. 4 differences. And there are always uncertainties, so... 4 And, so, and that's kind of a transfer. But 5 5 the welfare loss is from restriction in the But, you would expect that they would get paid 6 pretty much what the marginal benefit that they make for 6 employment. And, so, that's the way that's set up. 7 7 So, so, with that in mind, what was your the team, which is the marginal revenue product. 8 And I think that the "should" in there, and I 8 question about sports, then? 9 9 mean, I wrote this a long time ago. But I think the BY MR. SILVERMAN: 10 10 "should" in there is opening up the possibility that Q Well, I guess the first question is: Do you 11 11 you're not getting this competition and that, you know, think that monopsony in the -- in sports markets, let's 12 if the owners are colluding as, you know, their 12 say through collusion by the clubs in Major League 13 13 demonstrated episode in Major League Baseball. And then Baseball, for example, leads to any social harm? 14 there was actually a subsequent episode that wasn't very 14 MR. WIDNELL: You're just asking about 15 well publicized in baseball. We know that the owners in 15 baseball now? 16 the NFL colluded when they had that -- I forget the -- I 16 MR. SILVERMAN: Yeah. Let's talk about 17 17 forget the word now, when you get -- when you decide baseball for now. 18 that you're going to -- when the players just voted 18 THE WITNESS: Okay. So, so the way that --19 to -- to get rid of the union. I forget what the 19 that the monopsony is manifested in baseball, for 20 word -- the name. 20 example, has to do with things like the roster Q Decertify? 21 21 size. Okay? So, so, there's a -- you know, 22 22 A Yeah. When they decertified the union, you there's a limit to the roster size. And, if you 23 23 know, there was supposed to be some -- there should have assume -- now, I don't know for a fact, you know, 24 been a free-for-all. And apparently the owners agreed 24 as an empirical matter whether this is, in fact, 25 among themselves not to engage in that free-for-all. 25 correct, but if you assume that the binding

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146 148 1 constraint so they would have more people on the 1 trying to earn a living, you know, as a 2 2 roster than they actually have in the absence of construction worker. So, the quality of the play, 3 3 that constraint. you know, had to suffer. I mean, now, you know, 4 You know, you would say -- you know, you would 4 again, you know, you'd have to -- you know, people 5 infer the same sort of thing, that is that since 5 would ask for some empirical evidence of this. But 6 it's a binding constraint, the teams would get 6 you would -- you would surmise that the play would 7 7 additional value out of having more players on the have to suffer when you've got players that are 8 8 roster. And, you know, assuming that they could working construction instead of what, instead of 9 find people to play, fill out that larger roster, 9 training, instead of lifting weights, stretching, 10 10 which let's just assume that's possible, you would perhaps, you know, taking a hundred swings in the 11 11 have the same sort of welfare loss. And that is batting cage every day during the off season, or 12 12 that you have players that would contribute to the whatever -- you know, whatever major league players 13 overall value and that are not being employed. And 13 are doing now to maintain and advance their skills so there's a loss in value there. So, in that 14 14 during the off season. 15 15 sense, you know, there would be a social welfare Well, you know, a lot of players, back in the 16 16 loss by that restriction. days when they didn't make much money, had to work 17 You know, the fact that, say, Kris Bryant, you 17 at other jobs. And, you know, some of them sold 18 18 know, some budding star of the Chicago Cubs, you insurance and, you know, things like that. 19 know, to the extent that they're paying him, let's 19 So --20 20 say, \$500,000 and his marginal revenue product is BY MR. SILVERMAN: 21 far above that, that does not create any social 21 Q And could --22 harm because he's still playing. It's just he's 22 A And in that case -- well, your question is 23 23 what effect would this have. And, you know, I think the getting paid less so there's a distributional 24 24 effect, but, you know, but there's not a welfare effect that it would have is that the quality of the 25 loss there. 25 play would be lower and that, you know, in turn, could 147 1 BY MR. SILVERMAN: have an impact on fan demand for watching major league 2 Q Is it possible that paying players 2 games and, you know, and then, you know, to that extent, 3 substantially below their marginal revenue product could the value of the product that's being offered, that is 4 alter their incentives to invest, let's say, in their 4 the competition of the field, you know, is lower and 5 5 own training or their own professional development? consumers are worse off as a result. 6 Could that lead to a potential welfare loss? 6 O And couldn't that -- isn't that also a form of 7 MR. WIDNELL: Objection, form. 7 allocative inefficiency if the marginal revenue product, 8 8 THE WITNESS: Okay. So, so, if you think back let's say, of this athlete working in a construction job 9 9 to -- of course, I'm a lot older than everybody is less than the social value or the value -- or the 10 10 else in the room. But when I was a kid, the -- you revenue generated simply by the fan interest that they 11 know, the players in Major League Baseball, in the 11 would generate if they had devoted that time and energy 12 off season -- now, I think this -- this was 12 to training, let's say? 13 actually before I had a vivid -- any actual 13 A Yeah. You know, the problem -- the problem 14 recollection, but there were stories about, you 14 with the way you worded that, is that allocative 15 15 know, following the World Series. They would inefficiency is -- sounds like it ought to be -- have a 16 actually have major league stars barnstorming 16 more popular meaning than it does to economists. You 17 throughout the south playing exhibition games for 17 know, to an economist that allocative inefficiency is a 18 extra money instead of training and, you know, and 18 term of art and it means what I described earlier, that 19 that kind of thing. 19 is, that certain inputs in the case of, you know, where 20 20 You know, they had people that were, I we're talking about inputs or in terms of output that, 21 21 remember being a Dodgers fan, that Carl Furillo you know, things are either not being purchased or not 22 22 was, you know, one year he was a National League being produced, when the value is higher than the cost.

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And so there's a foregone value, and that's

related to. So, you know, we say that the monopolists,

what the -- that's what the allocative inefficiency is

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batting champion. And he worked in construction.

He had a hard hat job in the off season. And so he

wasn't working on his baseball skills. He was just

150 152 1 you know, there's allocative inefficiency associated if it leads to, you know, lower prices paid and lower 2 2 quantities purchased, you know, we think of those -with the monopolist, because the monopolist does not --3 3 that conduct as being anticompetitive. You know, it's does not put in enough resources to produce the welfare 4 maximizing quantity of output that it -- because it you know, conduct or practices that prevent competition 5 5 between alternative producers or alternative employers, restricts output. 6 6 And on the purchase side for buying inputs or you know, we think of as being anticompetitive. 7 7 hiring inputs, as the case may be, that the decision is Q And we discussed how the reserve clause gave 8 8 to -- is allocatively inefficient because too few teams monopsony power over the players and we discussed 9 resources are being purchased or hired in the sense that 9 how that led to suppressed salaries. Did it also lead 10 10 to lower output? their value exceeds their social cost. So that's 11 11 what -- so allocative inefficiency has a technical A I don't think it led to lower output in the 12 12 meaning. And you're asking me a question that relates sense that, you know, the teams -- the leagues had, you 13 13 know, at that time, a -- you know, a schedule of 154 to what happens to perhaps shifts in the demand 14 functions. And that's a different matter. 14 games. And, you know, it's hard to say whether it led 15 15 to a reduction in outputs in the National League. It Q Let me step back a beat and just ask you, is 16 16 was in place back in the 1800s, you know, so... it your opinion that the reserve system was 17 17 But by the same token, it's hard to imagine anticompetitive on balance, which is related to what 18 18 that you get many more games into a season anyway since we're talking about? 19 A You mean historically? 19 you only have basically six months to play, which is 180 20 20 days. And if you got 154 games, back in those days, the Historically. The historic reserve system. 21 Is anticompetitive? 21 travel was by train and bus and stuff. I mean, it's Α 22 22 just, you know, it's hard to imagine that they could Um-hum. 23 23 have played many more games than that anyway, but, you Is that the question? 24 24 know. Q Yeah. 25 25 Sure. In principle, maybe there was some, you know, 151 153 1 O And why? marginal reduction in the number of games. You know, I 2 2 can't -- I can't say, but... A Because the reserve system, you know, was in 3 agreement among the major league teams to use a standard 3 Q So, when you say that the reserve clause was 4 player contract that had the evergreen provision, or 4 anticompetitive, then, are you referring mostly to its 5 5 provisions whenever a collection of terms in the effect on players' salaries on that input price? 6 contract is what we commonly refer to as the reserve 6 A Well, it's that and the -- I mean, just on its 7 clause, which, you know, may have been more than a 7 face, when you describe, you know, what that reserve 8 clause. But constituted that reserve system so that, 8 system involved, you know, it did limit the competition 9 9 you know, once a player was signed to a contract, that between teams for a particular player's services. 10 10 the -- you know, the club had property rights in that Right? So, if you and I want to hire the same player, 11 11 contract and, you know, no one else could gain access to and he's under contract to me, then you have to buy that 12 that unless they sold it or traded it. 12 contract from me either for cash, or you could trade 13 And, you know, so the agreement among all the 13 somebody else's contract for that contract. 14 teams to respect that provision in the contract for all 14 But, you can't simply go to the player and 15 15 say, hey, why don't you -- next season, why don't you the other teams meant that they were agreeing, you know, 16 not to compete for the services of any player that was 16 play for me, because there's an agreement that you and I 17 17 under contract to a different team. are not going to compete in that way. 18 18 Q What is -- how would you define -- as a Q Does any agreement -- I'm sorry. Does any 19 scholar of antitrust economics, how would you define 19 practice that limits the competition between teams for a 20 what it means for a practice to be anticompetitive? 20 particular player's services anticompetitive? 21 21 A Well, a practice -- I mean, ordinarily, we MR. WIDNELL: Objection, form. 22 22 think of a practice as being anticompetitive if it's --MR. SILVERMAN: Strike that. Let me rephrase 23 23 if we're talking about the output market, at least the that 24 higher prices, lower quantities, lower quality. 24 BY MR. SILVERMAN: 25 25 And, you know, similarly, on the buying side, Q Is any practice that limits the competition

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174 176 1 of causation but, you know, but I think that the facts 1 A Well, I think that all of those contracts 2 2 unroll, you know, more or less the way that they're are -- yeah. I think that they're specified in terms of 3 3 spelled out there. shares of, you know, percentages of some amount which is 4 MR. WIDNELL: We've been going for about an 4 defined as -- you know, as revenue. So, the -- you 5 hour and a half. Can we take a break when you get 5 know, what you and I might think of as revenue might 6 to a convenient stopping point? 6 not -- some of those items might not be counted. 7 7 MR. SILVERMAN: Sure. Yeah. Let me do just a You know, I think that the definition of what 8 8 couple more and then, yeah. constitutes league revenue is -- you know, is set out in 9 MR. WIDNELL: Okay. 9 the collective bargaining agreement so that they're not, 10 BY MR. SILVERMAN: 10 you know, squabbling over, you know, what the size of 11 Q On page 434, you discuss the National 11 the total pie is that's supposed to be split up. 12 Basketball Players Association. And you write on the 12 And, as I recall, you know, it's pretty much, 13 13 you know, these are -- these are forecasted, you know, second to last paragraph, the bottom of that paragraph. 14 [As read]: With the settlement of the lawsuit, the NBA 14 based on, you know, recent experience. 15 15 players enjoyed true, unrestricted free agency. Now Yeah. And as I said, in there, in the NFL, 16 16 when an individual player's contract expires, the that gets translated into salary caps, which specify how 17 player's completely free to sign with the highest bidder 17 much each team can spend. But, I think what they do is 18 18 or any other team willing to hire them. As long as the they take, you know, whatever that percentage of the 19 clubs do not collude in a free agent market, a player 19 anticipated league revenue, whatever that amount is, 20 20 can negotiate a contract that will pay him something they divide by 32 because that's how many teams there 21 very close to his marginal revenue product. 21 are. And, you know, and each team gets 1/32 of that 22 22 amount to spend on players because they have a pretty Does that sound accurate to you? 23 23 hard salary cap, although there's a lot of strategic 24 24 manipulation of that amount. It's not quite as simple Q And on page 435, you write about the national 25 hockey league. [As read]: The NHLPA has had some 25 as it sounds. 177 1 internal problems, but appears to be on relatively solid 1 Q So, the team -- so, the collective bargaining 2 2 ground now. As with the other leagues, NHL players have is determining a -- strike that. 3 the usual array of benefits. Their salaries are 3 So, through collective bargaining in the NFL, 4 substantial as they are protected by market forces 4 the NBA, and the NHL, the players in the leagues are 5 5 through free agency. splitting some measure of league revenue; is that right? 6 6 A Yes. Is that accurate? 7 7 A I believe so, yes. Q And that split sets a -- for those three 8 Q And on page 438, you write [as read]: The 8 sports, at least, that split sets a salary cap; is that 9 9 NFLPA, the NBAPA, and the NHLPA bargain over the total right? 10 10 wage bill. The results are expressed as salary caps A Yes. 11 which limit the total payroll of each club. In Major 11 Q Or is it used to set a salary cap? 12 12 League Baseball, there is no salary cap, but there's a A Yes. 13 luxury tax that is imposed on clubs that spend more than 13 Q But the actual salaries that the players end 14 some threshold amount. The unions have little to do 14 up negotiating with their teams are determined by market 15 with the allocation of the salary dollars. Players 15 forces for free agents, at least; is that right? 16 bargain for salary dollars on their own with the help of 16 MR. WIDNELL: Objection, form. 17 17 THE WITNESS: Yeah. And the bargaining that an agent. Most of the other terms of employment, working conditions, pensions, contract terms are subject 18 18 goes on between the player and his agent with the 19 to negotiations between the union and the league. The 19 20 player's salary however is an individual matter between 20 BY MR. SILVERMAN: 21 21 Q On page 443 -the club and the player. 22 22 MR. WIDNELL: You know, I apologize. I really So, is it accurate to say that other than in 23 23 Major League Baseball, collective bargaining determines do need to take a break. 24 the total share of league revenues that can go to 24 MR. SILVERMAN: Oh, you need to do it now? 25 25 players as compensation? Okay. All right. Let's do it then.

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